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IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method for ~~processing~~ forming a transport stream ~~comprising a plurality of time slots for transporting therein respective~~ a plurality of encoded programs having a common time base indicated by periodically inserted time stamps, said method comprising:

defining a plurality of time slots within said transport stream, wherein each time slot is associated with one of said encoded programs;

including respective transport packets associated with said plurality of encoded programs within said plurality of time slots within said transport stream in a manner for maintaining a fixed number of time slots between consecutive transport packets associated with the same encoded program; and

~~modifying packets associated with a desired time slot of a received transport stream to produce an output transport stream; and~~

~~transmitting said output transport stream;~~

~~said transmitted output transport stream including respective modified wherein said encoded programs in said transport stream having have~~ said common time base indicated by said periodically inserted time stamps provided by said received transport stream, ~~wherein a modified packet uses a matching time stamp of said received transport stream.~~

2. (Currently Amended) The method of claim 1, further comprising:

modifying transport packets associated with one of said plurality of time slots to produce a modified transport stream;

wherein said modifying comprises replacing said transport packets associated with said ~~desired time slot~~ one of said plurality of time slots with other packets.

3. (Currently Amended) The method of claim 2, ~~wherein initial and replacement packets associated with said desired time slot represent respective first and second programs~~ said transport packets associated with said one of said plurality of time slots

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represent a first program from said plurality of encoded programs and said other packets represent a second program from said plurality of encoded programs.

4. Cancelled

5. (Previously Presented) The method of claim 3, wherein one of said first and second programs comprises a NULL program.

6. (Previously Presented) The method of claim 3, wherein the step of modifying packets further comprises:

(1) examining a packet received from said received transport stream to determine if a slot associated with said received packet corresponds to an insertion slot for said second program to be inserted;

(2) inserting, into an output transport stream, a next packet of said second program if said slot associated with said received packet corresponds to an insertion slot for said second program to be inserted;

(3) inserting, into said output transport stream, said received packet if said slot associated with said received packet does not correspond to an insertion slot for said second program to be inserted; and

(4) repeating steps (1) through (3) for each packet of said received transport stream until a replacement stream has been fully inserted into said output transport stream.

7. (Currently Amended) An apparatus for processing a received transport stream comprising N time slots for transporting therein N respective programs having a common time base indicated by periodically inserted time stamps, where N is an integer greater than one, said apparatus comprising:

a transport clock source;

a frequency divider for dividing a timing signal from said transport clock source into N timing signals;

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N transport encoders coupled to said frequency divider for respectively receiving and encoding said N programs to produce N encoded program streams, each of said N encoded program streams including a plurality of program transport packets; and

a multiplexer, coupled to ~~an output~~ respective outputs of said N transport encoders, for receiving ~~and modifying packets associated with a desired time slot of one or more transport encoded program streams~~ said program transport packets of said N encoded program streams, said multiplexer inserting said program transport packets into time slots of an output transport stream wherein each time slot of said output transport stream is associated with one of said N encoded program streams such that each time slot of the output transport stream is adapted for transporting program transport packets associated with the N encoded program streams in a manner for maintaining a fixed number of time slots between consecutive program transport packets associated with each of the N encoded program streams, said multiplexer producing a processed transport stream, said processed transport stream including ~~respective modified~~ wherein said programs ~~having~~ have said common time base indicated by said periodically inserted time stamps provided by said received transport stream, wherein ~~a modified packet uses a matching time stamp of said received transport stream.~~

8. (Currently Amended) The apparatus of claim 7, wherein the each program is encoded at a clock rate of CLK/N , wherein CLK comprises a clock rate of the timing signal from the transport clock source.

9. (Previously Presented) The apparatus of claim 7, further comprising a file server coupled between said multiplexer and said N transport encoders for storing the transport encoded program streams.

10. (Previously Presented) The apparatus of claim 7, wherein said modifying comprises replacing said packets associated with said desired time slot.

11. Cancelled

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12. (Currently Amended) Apparatus An apparatus for processing a received transport stream comprising a plurality of time slots for transporting therein a respective plurality of programs having a common time base indicated by periodically inserted time stamps, said apparatus comprising:

a transport clock source;

a frequency divider, for dividing a transport clock timing signal from said transport clock source into a plurality of timing signals; and

a plurality of encoders, each of said encoders coupled to said frequency divider for respectively receiving and encoding said plurality of programs to produce [[a]] respective encoded program stream streams, each of said encoded program streams including respective pluralities of program transport packets, each of said encoded program streams being coupled to a switch via [[a]] respective buffer memory memories;

said switch inserting program transport packets from said buffer memories into time slots of an output transport stream, wherein each time slot of said output transport stream is associated with a different one of the plurality of encoded program streams such that each time slot of the output transport stream is adapted for transporting program transport packets associated with each of said plurality of encoded program streams in a manner for maintaining a fixed number of time slots between consecutive program transport packets associated with each of said plurality of encoded program streams;

~~said switch selectively coupling program stream transport packets from said buffer memories for modifying packets associated with a desired time slot to produce a slotted transport stream, said slotted transport stream including respective modified wherein said programs having have said common time base indicated by said periodically inserted time stamps provided by said received transport stream, wherein a modified packet uses a matching time stamp of said received transport stream.~~

13. Cancelled

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14. Cancelled

15. Cancelled

16. (Currently Amended) The apparatus of claim 12, further comprising:

a file server, for storing an encoded program stream and selectively providing said encoded program stream to said switch in response to a subscriber request for said encoded program stream;

said switch inserting said at least one encoded program stream received from said file server into a corresponding time slot.

17. (Previously Presented) The apparatus of claim 16, wherein an identification of the time slot includes said requested program stream provided to said requesting subscriber.

18. (Previously Presented) The apparatus of claim 12, wherein a bitrate of an encoded transport stream is adapted by adding NULL packets to the slotted transport stream.

19. (Previously Presented) The apparatus of claim 18, wherein a number of NULL packets to add is determined according to at least one of an insertion rate, a slot repetition period and a packet count.

20. (Previously Presented) The apparatus of claim 12, wherein a bitrate of an encoded transport stream is adapted by deleting program packets from the transport encoded transport stream.

21. (Previously Presented) The method of claim 1, further comprising:
storing, in a file server, at least one transport encoded program; and

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in response to a subscriber request for a transport encoded program, including said requested transport encoded program within a respective time slot of said output transport stream being formed.

22. (Previously Presented) The method of claim 21, further comprising:
identifying, for said requesting subscriber, the time slot including said requested transport encoded program.

23. (Currently Amended) The method of claim 1, wherein a bitrate of said output transport stream is adjusted by deleting program packets and inserting NULL transport packets within said processed output transport stream.

24. (Previously Presented) The method of claim 23, wherein a number of NULL packets to insert is determined according to at least one of an insertion rate, a slot repetition period and a packet count.

25. (Previously Presented) The method of claim 23, wherein a number of program packets to delete is determined according to at least one of an deletion rate, a slot repetition period and a packet count.

26. (Previously Presented) The apparatus of claim 10, wherein initial and replacement packets associated with said desired time slot represent respective first and second programs.

27. (Currently Amended) Apparatus for generating a transport stream comprising a plurality of programs, each of said programs having associated with it a respective time slot, said apparatus comprising:

a frequency divider, for dividing a transport clock timing signal into a plurality of timing signals; and

a plurality of encoders, each of said encoders encoding a program stream from a received transport stream in response to a respective timing signal to produce a

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respective encoded program stream, each of said encoded program streams being coupled to a switch via a respective buffer memory;

said switch selectively coupling program stream transport packets from said buffer memories to produce a slotted transport stream, wherein each transport packet of each program stream is separated by a transport packet from at least one other program stream; and

said switch selectively coupling program stream transport packets from said buffer memories for modifying packets associated with a desired time slot to produce [[a]] said slotted transport stream, said slotted transport stream including respective modified programs having said a common time base indicated by said periodically inserted time stamps provided by said received transport stream, wherein a modified packet uses a matching time stamp of said received transport stream.

28. (Currently Amended) The apparatus of claim 27, wherein said ~~corresponding~~ desired time slot comprises an unused time slot.

29. (Previously Presented) The apparatus of claim 28, wherein said unused time slot included NULL transport packets.